

Forestland Interpretations

Forestland interpretations are important to good management. The management of trees begins with an understanding of the soil where they grow or are to be grown. Some soils are very suitable for growing wood crops; others barely support tree cover. Different tree species may vary in production on the same soil.

Forestland interpretations should be used to assist land users in planning, installing, and maintaining forestland management systems.

Forest Management and Productivity

The Forestland Management and Productivity tables presents information about suitable for producing timber for each soil map unit. Management concerns, which include hazard of erosion, equipment use, seedling mortality, and windthrow hazard, are listed by ratings of SLIGHT, MODERATE, or SEVERE. Information on potential productivity includes plant competition, common trees, site index, productivity class, and trees to plant.

Management Concerns

EROSION HAZARD - the risk of erosion is slight if the expected soil loss is small; moderate if some measures are needed to control erosion during logging; and severe if intensive management or special equipment and methods are needed to prevent excessive loss of soil.

EQUIPMENT LIMITATION - A rating of slight indicates that use of equipment is not limited to a particular kind of equipment or time of year; moderate indicates a short seasonal limitation, or a need for some modification in management of equipment; and severe indicates a seasonal limitation, a need for special equipment or management, or a hazard in the use of equipment.

SEEDLING MORTALITY - The ratings are for seedlings from a good planting stock that are properly planted during a period of sufficient rainfall. A rating of slight indicates that the expected mortality of the planted seedlings is less than 25 percent; moderate - 25 to 50 percent; and severe - more than 50 percent.

WINDTHROW HAZARD - A rating of slight indicates that trees in wooded areas are not expected to be blown down by commonly occurring winds; moderate - that some trees are blown down during periods of excessive soil wetness and strong winds; and severe that many trees are blown down during periods of excessive soil wetness and moderate or strong winds.

PLANT COMPETITION - A rating of slight indicates little or no competition from other plants; moderate indicates that plant competition is expected to hinder the development of the fully stocked stand of desirable trees; and severe means that plant

competition is expected to prevent the establishment of a desirable stand unless the site is intensively prepared, weeded, or otherwise managed for the control of undesirable plants.

POTENTIAL PRODUCTIVITY - This is discussed under the ordination class symbol.

COMMON TREES - Trees that generally occur on the soil are listed regardless of economic importance.

SITE INDEX AND PRODUCTIVITY CLASS - These are discussed under ordination class symbol.

TREES TO PLANT - Trees that are suitable for commercial wood production and that are adapted to the soil.

See the National Forestry Manual, Subpart B for criteria used in rating management concerns.

This subsection includes:

- **(a) Forest Management (one or two tables)**

Carroll County, Missouri
Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
01B: LAGONDA-----	---	---	---	---
02C2: LAGONDA-----	---	---	---	---
03B: ARMSTER-----	pin oak-----	70	57	black oak, green ash, northern red oak, pin oak, white oak
03C: ARMSTER-----	pin oak-----	70	57	black oak, green ash, northern red oak, pin oak, white oak
04C2: ARMSTER-----	pin oak-----	70	57	black oak, green ash, northern red oak, pin oak, white oak
04D3: ARMSTER-----	pin oak-----	70	57	black oak, green ash, northern red oak, pin oak, white oak
05B: GRUNDY-----	---	---	---	---

Carroll County, Missouri
Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
07C2: KNOX-----	northern red oak---- white oak-----	78 69	57 57	black walnut, eastern white pine, green ash, tuliptree
07E2: KNOX-----	northern red oak---- white oak-----	78 69	57 57	black walnut, eastern white pine, green ash, tuliptree
07F: KNOX-----	northern red oak---- white oak-----	78 69	57 57	black walnut, eastern white pine, green ash, tuliptree
08D3: KNOX-----	northern red oak---- white oak-----	78 69	57 57	black walnut, eastern white pine, green ash, tuliptree
09B: SHARPSBURG-----	---	---	---	---
09C2: SHARPSBURG-----	---	---	---	---

Carroll County, Missouri
Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
11B: LADOGA-----	northern red oak----	75	57	black walnut, eastern white pine, European larch, northern red oak, red pine, sugar maple, white oak
	white oak-----	75	57	
11C2: LADOGA-----	northern red oak----	75	57	black walnut, eastern white pine, European larch, northern red oak, red pine, sugar maple, white oak
	white oak-----	75	57	
14C2: GREENTON-----	---	---	---	---
14D2: GREENTON-----	---	---	---	---
16B: SAMPSEL-----	---	---	---	---
21B: WAKENDA-----	---	---	---	---
21C2: WAKENDA-----	---	---	---	---

Carroll County, Missouri
Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
23C2: HIGGINSVILLE-----	---	---	---	---
25C: GOSPORT-----	white oak-----	45	29	cottonwood, eastern white pine, Norway spruce, red pine, Scotch pine, white spruce
25D: GOSPORT-----	white oak-----	45	29	cottonwood, eastern white pine, Norway spruce, red pine, Scotch pine, white spruce
25F: GOSPORT-----	white oak-----	45	29	cottonwood, eastern white pine, Norway spruce, red pine, Scotch pine, white spruce
30: NODAWAY-----	white oak-----	65	43	black walnut, eastern white pine, European larch, red pine, sugar maple

Carroll County, Missouri
Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
32: COLO-----	---	---	---	---
34: ZOOK-----	---	---	---	---
36: WABASH-----	pin oak-----	75	57	eastern cottonwood, pecan, pin oak
42: BREMER-----	eastern cottonwood--	90	100	American sycamore, common hackberry, eastern arborvitae, eastern cottonwood, green ash, silver maple
	silver maple-----	80	29	
60: AHOLT-----	eastern cottonwood--	90	100	eastern cottonwood, green ash, pin oak
	pin oak-----	80	57	
62: BOOKER-----	eastern cottonwood--	85	86	eastern cottonwood, green ash, pecan, pin oak, silver maple
	silver maple-----	80	29	

Carroll County, Missouri
Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
64: COTTER-----	eastern cottonwood-- tuliptree-----	100 90	129 86	black walnut, eastern cottonwood, tuliptree
66: GILLIAM-----	eastern cottonwood-- pin oak-----	95 80	114 57	eastern cottonwood, pecan, pin oak
68: HAYNIE-----	American sycamore--- black walnut----- eastern cottonwood-- green ash-----	110 --- 110 ---	157 0 157 0	black walnut, eastern cottonwood
70: HODGE-----	eastern cottonwood-- silver maple-----	110 105	157 57	eastern cottonwood, green ash, silver maple
72: KENMOOR-----	eastern cottonwood-- green ash----- pin oak-----	85 60 75	86 43 57	eastern cottonwood, green ash, pin oak, sweetgum

Carroll County, Missouri
Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber	
			cu ft/ac	
74: LANDES-----	American sycamore--- eastern cottonwood-- green ash----- sweetgum----- tuliptree-----	--- 105 --- --- 95	0 143 0 0 100	American sycamore, black walnut, eastern cottonwood, eastern white pine, green ash, sugar maple, sweetgum, tuliptree
76: LETA-----	black willow----- eastern cottonwood--	--- 90	0 100	eastern cottonwood, green ash, pecan, silver maple, sweetgum
84: NORBORNE-----	pecan----- pin oak-----	75 90	0 72	eastern cottonwood, green ash, pecan, pin oak, tuliptree
86: PARKVILLE-----	eastern cottonwood-- pin oak-----	100 90	129 72	American sycamore, eastern cottonwood, pecan, pin oak, sweetgum

Carroll County, Missouri
Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
88: BREMER-----	eastern cottonwood-- silver maple-----	90 80	100 29	American sycamore, common hackberry, eastern arborvitae, eastern cottonwood, green ash, silver maple
90: WALDRON-----	eastern cottonwood-- pin oak-----	110 80	157 57	black willow, eastern cottonwood, green ash, pecan, pin oak, silver maple, sweetgum
92: WAUBONSIE-----	---	---	---	---
100: UDORTHENTS-----	---	---	---	---
W: WATER-----	---	---	---	---